Contents to Volume 6

Vol. 6 Nos. 1 & 2 January/February 1988

INFLUENCE OF MARINE AND TERRESTRIAL BIOSPHERE ON THE CHEMICAL COMPOSITION OF THE ATMOSPHERE

Edited by

WOLFGANG SEILER

(Fraunhofer Institut für Atmosphärische Umweltforschung, Garmisch-Partenkirchen)

W. SEILER / Preface 1

B. BONSANG, M. KANAKIDOU, G. LAMBERT, and P. MONFRAY / The Marine Source of C_2–C_6 Aliphatic Hydrocarbons 3

DANIEL O. SUMAN / The Flux of Charcoal to the Troposphere During the Period of Agricultural Burning in Panama 21

TH. CLASS and K. BALLSCHMITER / Chemistry of Organic Traces in Air VIII: Sources and Distribution of Bromo- and Bromochloromethanes in Marine Air and Surfacewater of the Atlantic Ocean 35

F. NOLTING, W. BEHNKE, and C. ZETZSCH / A Smog Chamber for Studies of the Reactions of Terpenes and Alkanes with Ozone and OH 47

R. E. NEWELL, S. T. SHIPLEY, V. S. CONNORS, and H. G. REICHLE, JR. / Regional Studies of Potential Carbon Monoxide Sources Based on Space Shuttle and Aircraft Measurements 61

RALF CONRAD and WOLFGANG SEILER / Influence of the Surface Microlayer on the Flux of Nonconservative Trace Gases (CO, H_2, CH_4, N_2O) Across the Ocean-Atmosphere Interface 83

JOACHIM SCHMIDT, WOLFGANG SEILER, and RALF CONRAD / Emission of Nitrous Oxide from Temperate Forest Soils into the Atmosphere 95

B. B. HICKS and D. R. MATT / Combining Biology, Chemistry, and Meteorology in Modeling and Measuring Dry Deposition 117

A. C. F. TREVITT, J. R. FRENEY, O. T. DENMEAD, ZHU ZHAO-LIANG, CAI GUI-XIN, and J. R. SIMPSON / Water-Air Transfer Resistance for Ammonia from Flooded Rice 133

M. O. ANDREAE, H. BERRESHEIM, T. W. ANDREAE, M. A. KRITZ, T. S. BATES, and J. T. MERRILL / Vertical Distribution of Dimethylsulfide, Sulfur Dioxide, Aerosol Ions, and Radon over the Northeast Pacific Ocean 149

Vol. 6 No. 3 April 1988

Publisher's Announcement iii

G. BEIG and D. K. CHAKRABARTY / On Modelling Stratospheric Positive Ions 175

ZDENĚK SLANINA / A Theoretical Evaluation of Water Oligomer Populations in the Earth's Atmosphere 185

R. ZANDER and PH. DEMOULIN / Spectroscopic Evidence for the Presence of the ν_4-Q Branch of Chlorine Nitrate ($ClONO_2$) in Ground-Based Infrared Solar Spectra 191

J. A. PYLE and A. M. ZAVODY / Radical Variability Determined from LIMS and SAMS Satellite Data 201

S. C. LIU and M. TRAINER / Responses of the Tropospheric Ozone and Odd Hydrogen Radicals to Column Ozone Change 221

Y. KONDO, H. MURAMATSU, W. A. MATTHEWS, N. TORIYAMA, and M. HIROTA / Tropospheric Ozone and Oxides of Nitrogen over the North-Western Pacific in Summer 235

BARRY J. HUEBERT, SCOTT VANBRAMER, and KRISTIE L. TSCHUDY / Liquid Cloudwater Collection Using Modified Mohnen Slotted Rods 251

ED BUIJSMAN and JAN-WILLEM ERISMAN / Wet Deposition of Ammonium in Europe 265

RONALD G. PRINN / Toward an Improved Global Network for Determination of Tropospheric Ozone Climatology and Trends 281

Announcements 299

Vol. 6 No. 4 May 1988

B. CLAIRAC, R. DELMAS, B. CROS, H. CACHIER, P. BUAT-MÉNARD, and J. SERVANT / Formation and Chemical Composition of Atmospheric Aerosols in an Equatorial Forest Area 301

D. G. MILCHUNAS, W. J. PARTON, D. S. BIGELOW, and D. S. SCHIMEL / Factors Influencing Ammonia Volatilization from Urea in Soils of the Shortgrass Steppe 323

R. FALL, D. L. ALBRITTON, F. C. FEHSENFELD, W. C. KUSTER, and P. D. GOLDAN / Laboratory Studies of Some Environmental Variables Controlling Sulfur Emissions from Plants 341

T. SUZUKI and S. TSUNOGAI / Origin of Calcium in Aerosols over the Western North Pacific 363

MICHAEL PRATHER / European Sources of Halocarbons and Nitrous Oxide: Update 1986 375